#### **REMARKS**

This is a full and timely response to the outstanding First Office Action mailed on October 14, 2007. In the Office Action, claims 1-14 are rejected under 35 U.S.C. 102 (b) as being anticipated by Tran (U.S. Patent No.5, 541, 924). In response thereto, Applicants would respectfully traverse the rejections as follows and reconsiderations for allowance of the presently pending claims 1-14 are respectfully requested.

## Discussion for rejection to claims under 35 U.S.C. § 102(b)

2. Claims 1-14 are rejected under 35 U.S.C. 102 (b) as being anticipated by Tran (U.S. Patent# 5, 541,924).

In response thereto, applicant respectfully traverse the preceding rejections based on the following arguments. To establish a prima facie case of anticipation, the cited reference (i.e. Tran) should teach, suggest or disclose all claim limitations.

In re claim 1, the claim 1 is partly recited as follows.

1. A channel sharing method, comprising:

providing a time slot, wherein a width of the time slot is X times of a maximum value of all the time intervals, and X is a positive number; each of the channels is generated by a permutation of at least one repeat time, and the repeat time is M times of the width of the time slot, wherein M is an integer larger than 0, and a first time slot of the repeat time

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# comprises a signal; and arranging all the channels so that at least one of the signals in each of the channels is not collided with the signals of the other channels in a worst time delay.

Although the Examiner alleged that in Tran, col.6, lines 28-40, 46-56, 56-64 and col.4, lines 47-60, discloses aforementioned underlined feature of claim 1, applicants respectfully disagree his/her allegation because such allegation is made based on misinterpretation of the claim 1. In fact, in Tran, all of lines 28-40, 46-56 and 56-64, in col.6, disclose acknowledgement made by up-link and down-link between subscriber units and a base site in a TDMA (time-division-multiple access) communication system (see line 61, col.6, ). In other words, Tran discloses "the subscriber unit, after gaining access to the up link channel of the time slot selected, begins to transmit segments of the packet. The WEI bit in slow channel of the downlink time slot received in frame k is used to indicate to the subscriber unit whether a segment transmitted in frame k-2 was received correctly by the base site." Thus, Tran doesn't disclose at all "claimed time slot is X times of a maximum value of all claimed time intervals that are referred to as durations of signals in each of a plurality of channels," rather only frames and slots. Moreover, Tran also fails to disclose "each of the channels is generated by a permutation of at least one repeat time, and the repeat time is M times of the width of the time slot," instead of how the acknowledgement is made by uplink path and downlink path. Additionally, Tran doesn't disclose at all "arranging all the channels so that at least one of the signals in each of the channels is not collided with the signals of the other channels in a worst time delay," rather

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avoiding receiving multiple transmissions in a channel (referred as contention), i.e. a single uplink/downlink channel pair (see lines 5-7, col.3, in Tran), through aforementioned acknowledgement made by uplink path and downlink path, as disclosed col.4, in Tran. In other words, all disclosure in Tran relates to one channel, not to multiple channels of the present application. Hence, Tran fails to teach, suggest or disclose aforementioned underlined feature of claim 1. Namely, the claim 1 is not anticipated by Tran and thus patentable.

In re claim 6, the claim 6 is partly recited as follows.

6. A channel sharing device, comprising:

### wherein each of the channels comprises:

a time interval and a time slot, wherein a width of the time slot is X times of a maximum value of the time intervals of the channels; each of the channels is generated by a permutation of at least one repeat time, and the repeat time is M times of the width of the time slot, and a first time slot of the repeat time comprises the signal; all the channels are arranged so that at least one of the signals in each of the channels is not collided with the signals of the other channels in a worst time delay.

Likewise, the Examiner rejects the claims on the same grounds as applied to the claim 1. Namely, the Examiner alleged that in Tran, col.6, lines 28-40, 46-56, 56-64 and

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col.4, lines 47-60, discloses aforementioned underlined feature of claim 6. However, as discussed in arguments applied to claim 1, Tran also fails to teach, suggest or disclose aforementioned underlined feature of claim 6. Namely, the claim 6 is not anticipated by Tran and thus patentable.

Regarding dependent claims 2-5 and 7-14, they should be patentable for the reason that they contain all limitation of their patentable respective base claims 1 and 6.

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### CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-14 are in proper condition for allowance and an action to such effect is earnestly solicited. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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